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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention]About a disposable diaper, this invention in particular does not have the local hit to the skin by the elastic member of a solid gathers part, and is excellent in a wearing feeling.

[0002]

[Description of the Prior Art]When the thing of a perfect brief type which has made trousers shape beforehand, and both the trousers-shaped sides have dissociated fundamentally as a disposable disposable diaper and it wears, there is a thing of the tape type which uses adhesive tape and is formed in trousers shape.

[0003]Among these, as shown in drawing 1 and drawing 2, the tape type disposable diaper made the long absorber (3) intervene between a non-liquid-permeable nature backseat (1) and a liquid permeability top sheet (2), and is provided with the long main part made into the shape which was narrow in the center section of the longitudinal direction in plane shape. On this non-liquid-permeable nature backseat (1) outside surface that serves as a backside when it furthermore wears. The fastening tape in which one engaging member of mechanical fasteners, such as fastening tape (4a) - (4d) which uses a binder, or the Velcro fastener, was formed is provided. The solid gathers (7a) (7b) of the right and left which become with a standing state along with this longitudinal direction at the longitudinal direction side part of a long main part in the case of wear are provided.

[0004]The polyethylene in which these solid gathers (7a) (7b) joined one side edge part to the edges-on-both-sides part of the longitudinal direction of the medial surface of a backseat (1), for example, The sideseat (10a) (10b) which consists of water-repellent nonwoven fabrics, such as polypropylene and PET, etc. is extended inside, By joining to a top sheet (2) by heat sealing or other means continuously on the end face edge (12a) (12b) along the side edge part

of the longitudinal direction, It is formed in the sideseat portion of the inside furthermore extended, and a tip edge (8a) (8b) of the thread rubber for solid gathers (11) which could give the shrinkage force to the longitudinal direction and adhered to it.

Furthermore, since it is joined by the both ends (a1) of a longitudinal direction - (a4) (shadow area in a figure) the top sheet (2) side, when these solid gathers open this disposable diaper at the time of use, they appear in erected state.

[0005]The thread rubber for leg gathers (6a) (6b) which met the longitudinal direction in order to form leg gathers (5a) (5b) in a joining section with the sideseat (10a) (10b) of the vena-contracta portion of the center section of the backseat (1) is fastened. The sheet made from polypropylene and the engagement sheet of another side of a mechanical fastener are adhered to the non-liquid-permeable nature backseat (1) outside surface which serves as a venter when it furthermore wears as a frontal tape in which above-mentioned fastening tape (4a) - (4d) is engaged and which is not illustrated.

[0006]

[Problem(s) to be Solved by the Invention]Thus, since solid gathers are what is provided for the purpose of prevention of the side leakage of the excrement at the time of wear, they are a structure which stands up at the time of wear and is close to the skin by the thread rubber for solid gathers. However, since this thread rubber for solid gathers was usually attached to linear shape along the tip edge of solid gathers, the hit to the skin became local and its wearing feeling at the time of disposable diaper wear was not preferred. Then, sufficient effect was not achieved although the disposable diaper which has the solid gathers which adhered the thread rubber of the book in parallel conventionally as this measure was proposed. In the case of the water-repellent nonwoven fabric used for these solid gathers, when the disposable diaper was used for a long time, urinary exudation etc. might occur.

[0007]

[Means for Solving the Problem]This invention was made in order to solve such a problem, and it develops a disposable diaper which has a good wearing feeling and prevented exudation of excrement.

[0008]Namely, a disposable diaper of this invention fastens a long absorber between a liquid permeability top sheet and a non-liquid-permeable nature backseat, Along with a longitudinal direction, a end face edge is fixed to a side part of a longitudinal direction of this liquid permeability top sheet side, respectively, And it has the solid gathers which adhered a long elastic member for solid gathers to a longitudinal direction, respectively, and fixed both ends to this liquid permeability top sheet side, In a disposable diaper which furthermore adhered a long elastic member for leg gathers to the outside of this end face edge along with a longitudinal direction of this side part, respectively, It is a good disposable diaper of a wearing feeling using

a long elastic film as this long elastic member for solid gathers, and it is effective to install a long elastic film crosswise in this case, and to make a long elastic member for leg gathers make it serve a double purpose.

[0009]

[Example] Drawings explain this invention in detail below.

[0010] (Working example 1) Drawing 3 is a cross-sectional view of the disposable diaper in which working example 1 of this invention is shown. The sideseat (10a) (10b) of a solid gathers (7a) (7b) part is turned up inside greatly, and is installed in it, and the tip edge is joined to the end face edge (12a) (12b) which is a joint position of this sideseat and a liquid permeability top sheet (2). The band-like elastic film (15a) (15b) was adhered to the medial surface of the sideseat (10a) (10b) furthermore turned up along with the longitudinal direction. As such an elastic film, the elastic film of non-liquid-permeable nature, such as a polyurethane system film and an olefin system film, is used. At this time, even if that lower end edge is installed to this end face edge (12a) (12b) and it makes it join to this, it is not necessary to join this elastic film. If the upper bed edge has reached to the tip edge (8a) (8b) of this sideseat (10a) (10b), it becomes effective by exudation prevention of the following urine, and when not having reached, this end edge part will comprise only a nonwoven fabric, and its wearing feeling at the time of wear will improve further.

[0011] Thus, since these whole solid gathers will be in an elastic state by using an elastic film as a long elastic member for solid gathers, the local hit to the skin becomes what was lost and was excellent in the wearing feeling like before. In this invention, since an elastic film can be stuck almost over the whole surface of solid gathers, the side leakage by urinary exudation etc. can be prevented effectively. Such an elastic film can reduce a manufacturing cost and manufacture losses greatly by using the product beforehand laminated in one for the nonwoven fabric used for a sideseat.

[0012] (Working example 2) As shown in drawing 4, the lower end edge of the elastic film in drawing 3 was installed to the both-sides edge of a sideseat (10a) (10b) and a backseat (1). Since the long elastic member for leg gathers can be made to serve a double purpose, manufacturing processes are reducible, and since the side part of a disposable diaper is non-liquid-permeable nature extensively further, it stops generating urinary exudation according to such a broader elastic film (16a) (16b).

[0013] (Working example 3) As shown in drawing 5, install the edges on both sides of a wrap liquid permeability top sheet (2), turn up the upper surface of an absorber (3) further, and the sheet of a solid gathers (7a) (7b) part is formed, In the case of the disposable diaper of composition of having joined to the tip edge of the sideseat (10a) (10b) which stuck the long elastic member for leg gathers (6a) (6b) which forms leg gathers on the end face edge (12a) (12b). A band-like elastic film (17a) (17b) is adhered to the sheet of the solid gathers part

which installs this top sheet (2) and is formed as an elastic member, and solid gathers (7a) (7b) are formed.

[0014] Thus, in the disposable diaper which is extending and making solid gathers for the material of the top sheet, composition is easy and can also reduce a manufacturing cost. However, since this top sheet is liquid permeability, the way things stand, it cannot prevent passage of these solid gathers of excrement. Then, it is this example which applied this invention to such a disposable diaper, As shown in a figure, install further the top sheet (2) of a solid gathers (7a) (7b) part, and it turns up to a end face edge (12a) (12b), By having adhered the band-like elastic film (17a) (17b) almost to the whole surface inside this solid gathers (7a) (7b) part by the stretched state, the leakage of the excrement from these solid gathers is lost for the non-liquid-permeable nature of this elastic film. Since it hits locally [ the hit to the skin of these solid gathers ], and on the whole also in this example, it fits gently.

[0015] (Working example 4) The example which applied this invention to the perfect trousers paper pattern diaper next is explained. An example of a perfect trousers paper pattern diaper covers the undersurface and the both-side-surfaces part of a long absorber (3) by a non-liquid-permeable nature backseat (1), as shown in the cross-sectional view of drawing 6, Cover the upper surface with a liquid permeability top sheet (2), and the solid gathers (7a) (7b) which consist of a water-repellent nonwoven fabric are formed in the shape of a set-up from the end face edge (12a) (12b) which is a join line with this backseat (1) of the edges on both sides of this top sheet (2), Furthermore, where the surface sheet (18) and (19) which fastened the elastic member for leg gathers (6a) (6b) to the edges-on-both-sides part is piled up, it sticks on the lateral surface of a non-liquid-permeable nature backseat (1). If the example which applied this invention is shown in such a perfect trousers paper pattern diaper, the water-repellent nonwoven fabric sheet of a solid gathers (7a) (7b) part will be formed \*\* by return like drawing 6, and it will become what adhered the band-like elastic film (20a) (20b) to this whole solid gathers surface of the inside by the stretched state. Thus, since solid gathers were constituted using the broad elastic film, since the hit to the skin is wide range, a feeling of wear is good, and since this film is non-liquid-permeable nature, there is no exudation from the solid gathers of excrement.

[0016] (Working example 5) The example which applied this invention to other perfect trousers paper pattern diapers next is explained. The perfect trousers paper pattern diaper shown by this example covers the undersurface and the both-side-surfaces part of a long absorber (3) by a non-liquid-permeable nature backseat (1) like drawing 7, Cover the upper surface with a liquid permeability top sheet (2), install further the edges on both sides of this top sheet (2) outside, and solid gathers (7a) (7b) are formed, The end face edge (12a) (12b) of these solid gathers (7a) (7b) and the tip edge of this backseat (1) are joined continuously, Furthermore, where the surface sheet (18) and (19) which fastened the elastic member for leg gathers (6a)

(6b) to the edges-on-both-sides part is piled up, it sticks on the lateral surface of a non-liquid-permeable nature backseat (1).

[0017] In the perfect trousers paper pattern diaper of this example, although solid gathers are formed using the material of a top sheet like working example 3, As shown in a figure, install further the top sheet (2) of a solid gathers (7a) (7b) part, and it turns up to a end face edge (12a) (12b). A band-like elastic film (21a) (21b) is adhered to the whole surface inside this solid gathers (7a) (7b) part by a stretched state, and the leakage of the excrement from these solid gathers is lost for the non-liquid-permeable nature of this elastic film.

[0018]

[Effect of the Invention] Thus, according to this invention using an elastic film broad as a long elastic member. Since the hit to the skin of solid gathers becomes less local in a disposable diaper, the wearing feeling at the time of wear improves. Since the elastic member for leg gathers can also be made to serve a double purpose while the side leakage of excrement, such as urine, decreases by installing this elastic film to the whole solid gathers surface and also a sideseat portion, there is an effect which can simplify a manufacturing process. If the sheet for solid gathers which still such an elastic film laminated beforehand is used, a manufacture loss is effective in the ability to also reduce a manufacturing cost few.

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[Translation done.]